Dietary Guidelines for Americans

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hat should you eat to be healthy? Answers to these questions are everywhere. They come from doctors, dentists, nurses, dietitians, the Federal Government, State and local health departments, extension agents, teachers, popular books, magazines, TV, and radio. Much information is available. Some of it is sound and sensible, but some is not and many people remain confused.

Health depends on many things, including heredity, lifestyle, personality traits, mental health and attitudes, and environment, in addition to diet. The life expectancy, average body size, and general good health of Americans seem to indicate that most diets are adequate. We have a varied, plentiful, and wholesome supply of foods from which we can choose. Food alone, however, cannot make you healthy, nor can dietary guidelines guarantee health. But good eating habits based on moderation and variety can help keep you healthy and even improve your health.

Dietary Guidelines, 1980

Government has a special role in assuring the health and safety of the American people. Providing information that healthy Americans can use to select a good diet has been part of the U.S. Department of Agriculture's (USDA) mission since its beginning. To help people deal with the confusion of nutrition fact and fiction,

USDA and the Department of Health and Human Services published *Nutrition and Your Health—Dietary Guidelines for Americans* in 1980.

Dietary Guidelines, 1985

In 1983, a nine-member Dietary Guidelines Advisory Committee of nutrition experts selected from outside the Federal Government reviewed the latest scientific data and reported their findings to the two Departments. Their recommendations formed the basis for the second edition of the Dietary Guidelines published by the Departments last September.

The second edition of the Guidelines is similar to the first edition. Some changes were made for clarity; others added guidance about nutrition topics that have been more prominent since 1980, such as following unsafe weight loss diets, using large-dose supplements, and drinking of alcoholic beverages by pregnant women.

These guidelines are for healthy people who want to reduce risks of nutritional deficiency diseases and of certain chronic diseases. They are not for people who need special diets because of diseases or conditions that interfere with normal nutritional requirements. These people may need special instruction from registered dietitians, in consultation with their own physicians.

They also are meant to be applied together to form a good diet. Because the guidelines refer to the total diet, they do not suggest that any single food or group of foods be eliminated. They emphasize variety, balance, and moderation. And they are not quantitative, but general and directional in approach. The first two guidelines on variety and weight maintenance form the framework of a good diet. The other five guidelines are specific characteristics of a good diet.

In addition, the Human Nutrition

Information Service staff with advice from the Extension Service, has prepared a series of 14 bulletins in support of these guidelines. The first seven bulletins give information about the guidelines; the next seven show how to use the guidelines while eating out, shopping, planning and preparing meals.

Eat a Variety of Foods. This simple guideline represents a complex food selection pattern. The intent is to eat the kinds and amounts of foods that will provide the protein. minerals, and vitamins your body needs. No one can be expected to keep track of the more than 40 different nutrients and food components needed for good health. Most foods provide more than one nutrient, but no single food provides everything. But most people can satisfy their nutritional needs by eating a balanced, varied diet that emphasizes the major food groups—fruits; vegetables; whole-grain and enriched breads, cereals, and other foods made from grains; dairy products; and meats, poultry, fish, eggs, and dry beans and peas.

For example, dairy products such as milk are a source of protein, fats, simple carbohydrates, vitamin A, riboflavin, and other B vitamins, calcium, phosphorus, and other nutrients. But they provide little iron, zinc, or vitamin C. Meat provides protein, several B vitamins, iron and zinc but little calcium or vitamin C. Vitamins A and C, folic acid, fiber, and various minerals are obtained from fruits and vegetables. Whole-grain and enriched breads, cereals, and other grain products provide B vitamins, iron, protein, and fiber.

A varied diet based on these food groups will satisfy the nutrient requirements of most healthy individuals without the need for supplements. The guidelines state that there are no known advantages and some potential harm in consuming excessive amounts of any nutrient and that large-dose supplements of any nutrient should be avoided.

There are a few exceptions to this general statement about supplement use. Women of childbearing age may need iron supplements. Pregnant and lactating women need amounts of several nutrients beyond what their usual diets may provide. Infants, 4 months and over, especially those who only breastfeed, may need supplemental iron—iron added to foods such as cereal or taken as supplements. Elderly people who use medication for treatment of disease may need supplements because drug and nutrient interactions reduce absorption of some nutrients in the body.

USDA has several publications available from the Government Printing Office that focus on the importance of variety in food selection. Food, published in 1979, is a colorful example of dietary guidance featuring balance and moderation as characteristics of a nutritious diet. It presents the "Hassle-Free Guide to a Better Diet," similar to the basic four food guide used since the 1950's. Ideas for Better Eating gives specific information on implementing the guidelines. It provides recipes for a variety of foods that incorporate all the guideline principles.

USDA cooperated with the American Red Cross in developing a six-session nutrition course, *Better Eating for Better Health*, that focuses on implementing the Dietary Guidelines and other timely nutrition messages. It is being offered by Red Cross chapters across the country.

The USDA family food plans at four different levels of cost, which were revised in 1983, control fat, cholesterol, sugars, and sodium at moderate levels and provide recommended amounts of vitamins and minerals. The least costly of these food plans is the thrifty food plan used by USDA as

the basis for benefits in the Food Stamp Program. Your Moneu's Worth in Foods focuses on ways of obtaining a nutritious diet while economizing on cost. A publication entitled Making Food Dollars Count provided sample meals for a family of four and was part of a campaign targeted to community leaders who work with low-income people. A new bulletin, Thrifty Meals for Two: Making Food Dollars Count, shows how to plan, buy for, and prepare low-cost meals and includes menus and recipes based on the nutritional needs of a couple over 51 years of age.

Maintain Desirable Weight.

Many people want to lose weight to look better, but other reasons are even more compelling. If you are too fat, your chances of developing some chronic disorders are increased. High blood pressure, increased levels of blood fats (triglycerides) and cholesterol, heart disease, strokes, diabetes, and many other types of ill health are among these chronic disorders. The weight of most adults should be no more than it was when they were about 25 years of age.

To maintain your weight—no loss and no gain—calorie intake from the food you eat needs to balance the calories you expend. To lose weight, you must take in fewer calories than you use. A more appropriate approach for most of us is to increase activity and use more calories than we take in.

Increased exercise has several payoffs: (1) You'll feel better; (2) exercise allows higher calorie intake with which to get needed nutrients, without unwanted weight gain; (3) exercise improves fitness which may help prevent heart disease; and (4) weight-bearing exercise may help prevent osteoporosis—a bone problem especially common among older white women.

In addition to increased physical

activity, cutting down on high-calorie, low-nutrient foods is the best means of reducing calories. Cutting down on food across the board may be risky. because you need significant amounts of nutrient-providing foods daily to get recommended amounts of nutrients. Almost all foods have some calories. But some-often the ones we like best-have more than others. Foods high in fats are the most caloric. Every gram of fat has about 9 Calories—over twice as much as a gram of starch or sugar. A gram of alcohol has about 7 Calories. Fats, oils, sugars, and sweets as ingredients in foods or added to foods can be cut back to reduce calories: they are not nutrient providers. Also, the fat parts of animal foods such as meats and milk can be avoided to further cut calories. And alcohol, of course, can be avoided, too.

Severely restricted low-calorie diets make it extremely difficult to obtain the nutrients essential to maintaining good health. They also can have other adverse effects. Diets of less than 800 Calories a day can be hazardous and should be followed only under medical supervision. The guidelines warn that some people have developed kidney stones, disturbing psychological changes, and other complications while following such diets. A few people have died suddenly and without warning. Frequent use of laxatives, induced vomiting, and other extreme measures should not be used to lose weight. Such actions can cause chemical imbalances that can lead to irregular heartbeats and even death.

In addition to being hazardous, quick weight-loss schemes usually fail. Long-term success in losing weight and maintaining a desirable weight depends on adopting new and better habits of eating and exercise. USDA has prepared two publications that are helpful to dieters—Calories and Weight and Food 2: A Dieter's Guide.



USDA publications provide nutrition information to consumers.

Avoid Too Much Fat, Saturated Fat, and Cholesterol.

The American diet, which is relatively high in fat—especially saturated fat and cholesterol—goes with high blood cholesterol and heart disease. Studies show that, for many people, eating extra saturated fat, high levels of cholesterol, and excess calories will increase blood cholesterol. Extra saturated fat appears to be the biggest factor. If you have a high blood cholesterol level, your chances of a heart attack are greater. High blood pressure and cigarette smoking are risk factors, too. And heredity seems to play a big role.

The association of cholesterol with heart disease has been highly publicized for more than three decades. But much confusion remains about blood cholesterol versus dietary cholesterol, and food sources of cholesterol and saturated fatty acids.

Your blood or serum cholesterol, measured by the doctor, is most important. If it's above 200–240 milligrams per deciliter—depending on your age—your doctor may suggest a special diet or a diet and medication. The special diet will limit foods with saturated fat and dietary cholesterol, and possibly calories as well, if you're overweight.

Dietary cholesterol—or the cholesterol in food—is found in large amounts in egg yolks and organ meats; it is in both the fat and the lean of meats, and the fat in milk. Poultry has nearly as much cholesterol as red meats. Cholesterol is not in foods of plant origin.

Fats in foods are mixtures of different types of fatty acids—but animal

fats have more saturated fatty acids than do vegetable fats. Exceptions are palm and coconut oils, which are high in saturated fats. Red meats have more saturated fats than poultry and fish. A diet designed to reduce blood cholesterol by reducing fat intake will stress the use of poultry and fish.

Many animal foods that contain saturated fat and cholesterol, such as milk, meat, and eggs, also provide high quality protein and certain hard-to-get minerals such as iron, zinc, and calcium. So it is important to choose low-fat kinds of meats and milk and milk products most of the time. Some specific tips on how to avoid too much fat, saturated fat, and cholesterol are:

- Choose lean meat, poultry, and fish. Trimming the fat from a beef rump roast can reduce fat by twothirds. Removing the skin from a roasted chicken breast can cut the fat in half.
- Use skim or low-fat milk. A cup of whole milk has 8 grams of fat; a cup of skim only about one-half of a gram.
- Moderate use of egg yolks and organ meats because of their high concentration of cholesterol.
- Limit use of fats and oils. They provide mainly fat and few vitamins and minerals.
- Avoid fried foods, especially breaded ones. One half of a batterfried chicken breast is about equal to one-half of a roasted chicken breast plus 1 slice of bread and 2 teaspoons of fat.
- Look at labels of commercially prepared bakery goods and other mixtures. Many show the amount and kind of fat contained.

More information about this guideline is available in Food 3: Eating the Moderate Fat and Cholesterol Way, developed by the Human Nutrition Information Service, USDA and published by the American Dietetic Association.

Eat Foods with Adequate Starch and Fiber. Eating foods high in fiber can reduce symptoms of chronic constipation, diverticular disease, and some types of irritable bowel. Some evidence suggests that diets low in fiber may increase the risk of developing colon cancer, but further research is needed to be certain.

Starch and fiber are complex carbohydrates found in foods like breads and cereals, dry beans and peas, vegetables, nuts, seeds, and fruits. In addition to carbohydrates, these foods contain many essential nutrients and, except for nuts and seeds, have little or no fat. They also contain no cholestrol; no foods of vegetable origin contain cholesterol. With the exception of fruits, these foods also contain little of the simple kind of carbohydrate—sugar.

A moderate increase in dietary fiber of different types is desirable. This means, for most of us, eating more whole-grain products, fruits, vegetables (including the edible skins and seeds), and dry beans and peas. There is no need to take fiber supplements or to add fiber to foods that do not contain it. Studies show that too much fiber may prevent certain hard-to-get minerals, such as iron and zinc, from being absorbed by the body.

To eat more starch and fiber, substitute starchy foods—breads, cereals, and starchy vegetables such as beans, peas, and potatoes—for foods high in fats and sugars. Also, choose foods with different kinds of fiber every day—some whole-grain breads and cereals and some fruit with edible skins or seeds, for example.

Avoid Too Much Sugar. If you choose sweet pastries, jam on toast,

and sweetened cereal for breakfast; if you use sugar in your coffee and tea or hit the soft drinks regularly; if you find the meal incomplete without a sweet dessert or the day incomplete without cookies or candy—you are a sweets junkie, like many other Americans.

You should avoid too much sugar because (1) sweets may replace foods that are more nutritious and (2) too much sugar causes tooth decay. The form in which you eat sugar and when you eat it is important, too. Sticky sweets are the worst kind, and eating them often adds to the problem. Guard against between-meal sweets. Of course, brushing and flossing your teeth immediately after eating helps combat decay, as does fluoride in the water or in toothpaste and mouth rinses.

There are many types of added sweeteners—sucrose, glucose, dextrose, sorbitol, fructose, maltose, lactose, manitol, honey, corn syrup, molasses, maple syrup. Some ways to control the amounts in your diet are:

- At the store, look at ingredient labels on foods you buy. Try to avoid foods that have one of these ingredients listed first or second (ingredients are listed in order by their content in the food) or that have several of these ingredients listed.
- In the kitchen, adjust recipes by cutting back on sugars a little at a time. Plan meals without soft drinks, other sweetened beverages, sweet desserts, and baked goods.
- At the table, cut back on the sugar, honey, jams, jellies, and syrups added to foods.

Avoid Too Much Sodium. Sodium is essential to the human body, but most Americans consume far more than they need. The principal concern with high-sodium consumption is for people with hypertension (high blood pressure) and those who

may be susceptible to it.

For both the 60 million Americans who have high blood pressure and the rest of us who may get it, avoiding too much sodium is sensible. Table salt is not the only source, for a wide variety of sodium compounds is used in many processed foods and beverages.

To avoid too much sodium:

- Learn to enjoy the flavors of unsalted foods.
- Cook without salt or with only small amounts.
- Add little or no salt at the table.
- Cut down on salty foods—chips, salted nuts and popcorn, condiments (soy sauce, steak sauce, garlic salt), pickled foods, cured meats, some cheeses, and some canned vegetables and soups.
- Read labels for clues on amounts of sodium in processed foods.

USDA's Sodium Content of Your Food and the Nutritive Value of Food contain information about the sodium content of food. USDA and the Food and Drug Administration have published Sodium—Think About It, which provides information on how to reduce dietary sodium.

If You Drink Alcoholic Beverages, Do So In Moderation.

From a nutritional standpoint, alcoholic beverages are high in calories but provide little else of nutritional benefit. Overweight people should be aware that alcohol adds calories. Heavy drinkers especially can suffer appetite loss, and this can lead to nutritional deficiencies and other health problems, such as cirrhosis of the liver and some types of cancer. This dietary guideline also supports the national effort to discourage drinking and driving.

The National Institute on Alcohol Abuse and Alcoholism advises pregnant women to refrain from using alcoholic beverages because excessive consumption may cause birth defects or other problems during pregnancy. The level of consumption at which risks to an unborn child occur is not known.

In summary, we define a nutritious diet as one composed of a variety of foods (some vegetables; fruits; breads and cereals; milk products; and meats, poultry, fish, eggs, and dry beans and peas) in amounts to result in desirable body weight, selected to include some starchy and fiber-containing foods, but one that avoids too much fat, sugars, sodium, and alcohol.

Future Research

Effective nutrition education depends on three major areas of research:

- 1. Research to establish the standards of a good diet. Studies of nutrient requirements and the association between dietary factors and health and disease help us to identify the features of a good diet. These features become the goals of dietary behavior in nutrition education efforts. For example, studies that determine the level of dietary iron needed to prevent anemia and related conditions help establish the standard for recommended iron intake.
- 2. Research to determine current dietary status. Dietary surveys such as USDA's Nationwide Food Consumption Surveys tell us how successful Americans are in meeting dietary standards. These research findings allow nutrition education efforts to focus on the most important issues and to be targeted to those at the greatest nutritional risk. For example, intakes of dietary iron by women of childbearing years and young children that do not meet standards suggest an obvious focus for nutrition education efforts.
- 3. Research to determine the most effective methods of nutrition education. This area of research helps us to

know how we can best get from where we are to where we should be in dietary behavior. Further research in nutrition education will focus more attention on:

- Understanding the process of nutrition education. This type of research focuses on the thought processes in developing interest, understanding, and acceptance of nutrition education messages.
- Identifying for target audiences the characteristics and attitudes that have a bearing on the success of nutrition education efforts.
- Developing improved methods of measuring the effectiveness of nutrition education efforts.

This research has a single goal—the development of effective nutrition education materials and programs. Some nutrition education activities are the responsibility of USDA and other Federal agencies. Increased coordination among government, health professionals, academia, and industry, however, could lead to a network of nutrition education activities that are more effective in improving the American diet.

Further Reading

Better Eating for Better Health, 1982, American National Red Cross, Washington, DC.

Food 2: A Dieter's Guide, 1982, American Dietetic Association, Chicago, IL 60611.

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The following U.S. Department of Agriculture publications are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

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